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Noise Control-Improving the Quality of Life

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at the address below.

Institute of Noise Control Engineering - USA (INCE-USA)
INCE-USA Business Office
11130 Sunrise Valley Drive
Suite 350
Reston, VA 20190
USA

Phone: +1 703 234 4124
Fax: +1 703 435 4390

ibo@inceusa.org

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NOISE-CON 2017 – Plenary and Technical Sessions

Papers are listed by Session by Day and Order of Presentation

MONDAY – 12 JUNE 2017

Plenary Session

8:00 AM – River Overlook A/B

- [NC17 001](#) - *Career Lessons Learned from Laymon Miller and Others1*
James D. Barnes, Acentech

Architectural Acoustics and Vibration Control

10:30 AM – River Overlook A/B

- [NC17 352](#) - *Budget vs. Acoustics: Get in the Game Early, Play Like a Team, Win6*
Hannah D Knorr, KJWW Engineering
- [NC17 461](#) - *Investigation of Wind-Induced Noise in a High-Rise Condominium, A Case Study12*
Peter B Allen, Acoustics By Design
- [NC17 471](#) - *An Attempt to Use the Lombard Effect to Prescribe Effective Acoustical Treatments in a University Cafeteria Space22*
Casey Corrado, Tufts University; Jennifer Scinto, Tufts University
- [NC17 334](#) - *Fitness Noise Impact in Mixed Use Buildings29*
Walid Tikriti, Acoustonica
- [NC17 378](#) - *Mitigating the Effects of Crossfit Weight Drops with an Inertia Base System35*
Richard S Sherren, Kinetics Noise Control; Angela Waters, Kinetics Noise Control; Scott Walker Smith, Ballentine Walker Smith Inc.; Aaron C. Austin, Ballentine Walker Smith, Inc.

Enclosures

10:30 AM – River Overlook C

- [NC17 522](#) - *Measurement of Statistical Energy Analysis Parameters on a Test Enclosure44*
Keyu Chen, University of Kentucky; David W. Herrin, University of Kentucky
- [NC17 367](#) - *Boundary Measurements in a Reverberation Chamber and Implications on Acoustic Enclosures52*
David C Copley, Caterpillar
- [NC17 477](#) - *Adding Muffler Elements to Partial Enclosures to Improve Performance61*
Shujian He, University of Kentucky; David W. Herrin, University of Kentucky
- [NC17 320](#) - *Turbine Acoustic Enclosures69*
Corey A Fuzak, Solar Turbines Incorporated

- [NC17 414](#) - *Power Generator Set - Acoustic Enclosure Modeling for Low Frequency Noise Prediction*74
Shashikant More, Cummins, Inc.; Puneeth Gandla, Cummins India LTD.; Anand Fapal,
Cummins India LTD.

Transportation Noise (Air)

10:00 AM – River Overlook D

- [NC17 336](#) - *Real Time Helicopter Noise Modeling for Pilot Community Noise Awareness*79
Eric Greenwood, NASA Langley Research Center
- [NC17 347](#) - *Flyover Noise Simulation Using NASA's Coupled Aircraft System Noise Prediction and Auralization Frameworks*88
Brian C. Tuttle, Analytical Mechanics Associates, Inc.; Aric R. Aumann, Science Applications International Corporation, Inc.; Stephen A. Rizzi, NASA Langley Research Center; Jeremy J. Jones, Analytical Mechanics Associates, Inc.; Leonard V. Lopes, NASA Langley Research Center
- [NC17 465](#) - *Noise Estimation for Future Large-Scale Small UAS Operations*96
Vishwanath Bulusu, University of California, Berkeley; Valentin Polishchuk, Linkoping University; Leonid Sedov, Linkoping University, Norrkoping, Sweden
- [NC17 357](#) - *Rotorcraft Acoustic Flight Testing for Community Noise Reduction*104
Michael E. Watts, NASA Langley Res Ctr
- [NC17 512](#) - *Sound Emission of Heavy Helicopters*113
Jan A Marheim, Avinor AS; Kaare H Liasjo, Avinor AS

Classic Papers

10:00 AM – River Overlook E

(Oral Presentations Only)

- Overview of C. E. Ebbing And T. H. Hodgson's 1974 Paper on Diagnostic Tests for Locating Noise Sources: Classical Techniques (Part I); Signal Processing Techniques (Part II)*
Jonathan Chen, University of Kentucky
- Overview of A. H. Hakimi And R. P. Kachru's 1974 Paper on Noise Reduction in Tractor Cabs by Isolation Mounting*
Steven C Campell, University of Kentucky
- Overview of Moreland's Controlling Industrial Noise by Means of Room Boundary Absorption*
Weiyun Liu, University of Kentucky
- Overview of T. Wolde`s 1976 Paper on Reciprocity Measurement of Acoustical Source Strength in an Arbitrary Surrounding*
Keyu Chen, University of Kentucky
- Overview of R. L. Bannister's 1975 Paper on Structural Models for Vibration Control*
Kangping Ruan, University of Kentucky
- Overview of Ingard and Maling's 1974 Paper On Physical Principles of Noise Reduction: Energy Considerations, Noise Reducing Elements, and Sound Absorbing Materials*
Rui Cao, Purdue University

Building Acoustics Measurement and Modeling

1:30 PM – River Overlook A/B

- [NC17 344](#) - *Case Study: Measuring Vibration Transmission from Roadway to a Highly-Sensitive Building126*
Kyle Hellewell, RWDI AIR Inc.; Steve Meszaros, RWDI AIR Inc.
- [NC17 398](#) - *Chiller Sound Radiation Measurements & Modeling132*
Stephen M Wells, Penn State University; Timothy A Brungart, Penn State; Stephen A Hambric, Professor in the Graduate Program in Acoustics, Associate Director of Penn State's Center for Acoustics and Vibration, and Senior Scientist, Penn State Applied Research Laboratory
- [NC17 341](#) - *Field Measured Variation of Low Frequency Impact Noise in a Wood Frame Building.*
Wilson R Byrick, Pliteq Inc.140
- [NC17 389](#) - *Evaluation of Test Specimen Perimeter Sealing Material's Impact On Laboratory Testing of Diffuse Field Sound Absorption146*
Brett J. Seward, Johns Manville
- [NC17 437](#) - *Optimized Acoustics Research Program Update: Achieving High Sound Isolation When a Suspended Acoustical Ceiling Runs Continuously Over Partial-Height Demising Walls154*
Gary S. Madaras, ROCKFON; Andrew E., Heuer, NGC Testing Services

Mining Noise

1:30 PM – River Overlook C

- [NC17 475](#) - *Noise From a Mine Shaft Ventilation Fan167*
Richard J Ruhala, Kennesaw State University; Laura A Ruhala, Kennesaw State University
- [NC17 402](#) - *Application of Transfer Path Analysis Techniques to Determine Noise Source Contribution in Mining Equipment176*
Hugo E Camargo, NIOSH/CDC; Jeffrey S Peterson, NIOSH/CDC; Brian Y Kim, NIOSH/CDC
- [NC17 401](#) - *Surveillance Data and Noise Control Development in Mining184*
Amanda S. Azman, National Institute for Occupational Safety and Health; Kan Sun, National Institute for Occupational Safety and Health
- [NC17 394](#) - *Improved Silencer Design Specifications for Representative Mine Conditions192*
Felipe Calizaya, Mining Engineering, University of Utah; Sekhar Bhattacharyya, New Mexico Tech; Brenton Mumford, Graduate Student, University of Utah
- [NC17 375](#) - *Optimization of Machinery Noise in a Bauxite Mine Using Genetic Algorithm200*
D S Rao, National Institute of Technology; D. P. Tripathy, National Institute of Technology

Transportation Noise (Rail)

1:30 PM – River Overlook D

- [NC17 330](#) - *Development of a GenSet Locomotive Noise Contour Model and Comparison with Measurements211*
Jon W Mooney, FES Group/ KJWW

- [NC17 411](#) - *Abatement of Rail Noise - Especially for Infrastructure -218*
Percy Appel, German Environment Agency Umweltbundesamt - UBA; René Weinandy,
German Environment Agency Umweltbundesamt - UBA
- [NC17 457](#) - *Examination of the Trade-Offs Between Accuracy and Feasibility in Aspects of Ground-Borne Vibration Propagation Testing225*
Herbert L. Singleton, Cross-Spectrum Acoustics, Inc; Juan C. Montoya, Cross-Spectrum
Acoustics, Inc.

Classic Papers and Education

1:30 PM – River Overlook E

Overview Of Clifford Bragdon's 1974 Paper on Community Noise: A Status Report
Mahsa Asgarisabet, Michigan Technological University; Andrew Barnard, Michigan
Technological University

Overview Of J. B. Moreland's 1976 Paper on: Controlling Industrial Noise by Means of Room Boundary Absorption
Yutong Xue, Purdue University

- [NC17 358](#) - *Pre-College Noise Control Education at Michigan Technological University*
Miles B Penhale, Michigan Technological University; Andrew R Barnard, Michigan
Technological University233

HVAC and Building Systems Noise Control

3:40 PM - River Overlook A/B

- [NC17 319](#) - *Upgraded Vibration Isolation of Dry-Type Transformer Cores Within an Electrical Unit Substation241*
Jeffrey L Fullerton, Acentech
- [NC17 333](#) - *Pool Equipment Mechanical Noise Impact249*
Walid Tikriti, Acoustonica
- [NC17 458](#) - *Performance Evaluation of a Syntactic-Foam Water Hammer Arrestor258*
Kenneth A Cunefare, Georgia Tech; Maxwell F Toothman, Georgia Tech; Jarrett Chai,
Georgia Tech; Fahad T Vora, Georgia Tech
- [NC17 495](#) - *Characterization of Sound Power Level Spectra Produced by HVAC Chillers with Double Helical Rotary Screw Compressors Under Various Operating Conditions266*
Daniel A Y Hemme, BAi, LLC & University of Texas at Austin; David A Nelson, Nelson
Acoustics; Preston S Wilson, University of Texas at Austin
- [NC17 462](#) - *A Review of Prior Research on Assessing Insertion Loss and Breakout Transmission Loss of Ductwork 274*
Kangping Ruan, University of Kentucky; David W. Herrin, University of Kentucky
- [NC17 387](#) - *Descriptors of Sound From HVAC&R Equipment285*
Weonchan Sung, Purdue University; Patricia Davies, Purdue University; John Stuart
Bolton, Ray W. Herrick Laboratories, School of Mechanical Engineering, Purdue
University

Mining Fan Noise

3:40 PM – River Overlook C

- [NC17 399](#) - *Design of Low Speed Rim Driven Ventilation Fan for Minimum Noise294*
Mark Pastor Hurtado, Virginia Polytechnic Institute and State University Virginia Tech;
Daniel Wu, Virginia Polytechnic Institute and State University Virginia Tech; Ricardo
Burdisso, Virginia Polytechnic Institute and State University Virginia Tech
- [NC17 381](#) - *Redesign of Rotor and Stators for Noise Reduction of Continuous Miner Scrubber Fan302*
Kyle Wayne Schwartz, AVEC Inc.; Ricardo A Burdisso, AVEC Inc.; Matthew Langford,
Techsburg; Patricio Alberto Ravetta, AVEC Inc.

Construction Power Tools and Equipment

3:40 PM – River Overlook D

- [NC17 385](#) - *The Blue Angel - News310*
Christian Fabris, German Environment Agency
- [NC17 440](#) - *Reducing Leaf Blower Noise: A Product Noise Control Success Story317*
David A Nelson, Nelson Acoustics
- [NC17 488](#) - *Comparison of Ten Circular Saw Blades Using the Feed Rate Adjusted Sound Power Level
When Cutting MDF Board325*
Edward L Zechmann, National Institute for Occupational Safety and Health
- [NC17 490](#) - *Comparison of the Continuous and Transient Performance of Five Classical Filter Designs
for Impulsive Noise Characterization350*
Edward L Zechmann, National Institute for Occupational Safety and Health
- [NC17 560](#) - *Lawn Mower Noise362*
Leslie D. Blomberg, Noise Pollution Clearinghouse; Peter Sawchuck, Power Tool Industry
Consultant; Peter Sawchuck, Power Tool Industry Consultant

TUESDAY – 13 JUNE 2017

Joint SAE/INCE-USA Session 904 Aerodynamic Noise Prediction and Validation

10:00 AM – Ballroom D

- [2016-01-1809](#) - *Flow Induced Interior Noise Prediction of a Passenger Car369*
Alexander Schell, Daimler AG; vincent Cotoni, CD-adapco
- [2017-01-1786](#) - *Experimental and Numerical Investigations on Control Methods of Cavity Tone by Blowing Jet in an Upstream Boundary Layer379*
Hiroshi Yokoyama, Toyohashi Univ of Technology; Taiki Minato, Toyohashi Univ of Technology; Ryo Adachi, Toyohashi Univ of Technology; Akiyoshi Iida
- [2017-01-1784](#) - *Inverse Method on Vehicle' Panels for Wind Noise Source Identification388*
Guillaume Baudet, Renault
- [2017-01-1785](#) - *Characteristics of Non-stationary Sources of Wind Noise Measured with a Surface Pressure Array403*
Paul Bremner, AeroHydroPLUS; Scott Clifton; Chris Todter
- [2017-01-1783](#) - *Effect of Screens and Pinhole Size on Measured Fluctuating Surface Pressures Using a Micro-Electro-Mechanical Microphone Array412*
Chris Todter; Christophe Marchetto, Universite de Sherbrooke; Olivier Robin, Universite de Sherbrooke; Alain Berry; Paul Bremner, AeroHydroPLUS
- [2017-01-1788](#) - *An Analysis on Automotive Side Window Buffeting using Scale Adaptive Simulation420*
Kishore Ulli, Tata Technologies Ltd; Upendar Rao Gade

Joint SAE/INCE-USA Session 907

Aircraft Interior Noise

10:00 AM – River Overlook A/B

- [2017-01-1765](#) - *Noise Control Capability of Structurally Integrated Resonator Arrays in a Foam-Treated Cylinder434*
Albert Allen, NASA Langley Research Center; Noah Schiller, NASA Langley Research Center; Jerry Rouse, Sandia National Laboratories
- [2017-01-1766](#) - *Target Setting and Prediction for Cabin Noise and Vibration in Aircraft Development444*
Dirk von Werne, Siemens Industry Software; Anneleen Van Gils, Siemens Industry Software; Thierry Olbrechts, Siemens Industry Software; Stefano Orlando, Siemens Industry Software; Ivan Bosmans, Siemens Industry Software
- [2017-01-1764](#) - *SEA Model Development for Cabin Noise Prediction of a Large Commercial Business Jet456*
Himanshu Dande, Gulfstream Aerospace Corp; Tongan Wang, Gulfstream Aerospace Corp; John Maxon, Gulfstream Aerospace Corp; Joffrey Bouriez, Jet Aviation AG

Sound Masking

10:00 AM – River Overlook C

- [NC17 451](#) - *Expanding the Use of Controlled Minimum Background Sound Throughout Healthcare Facilities463*
Ric Doedens, K.R. Moeller Associates Ltd.
- [NC17 407](#) - *Adaptive Volume Control for Sound Masking Systems: How It Works and Analysis of Performance470*
Andre L'Espérance, Soft dB inc.; Alex Boudreau, Soft dB inc.; François Gariépy, Soft dB inc.; Louis-Alexis Boudreault, Soft dB inc.; Roderick Mackenzie, Soft dB inc.
- [NC17 345](#) - *A Method of Enhancing Speech Privacy479*
Edward R Green, Bruel and Kjaer Global Engineering Services; Bret Engels, Bruel and Kjaer Global Engineering Services; Alexey Krasnov, Guardian Industries; Barry Corden, Guardian Industries

Community Noise

10:00 AM – River Overlook D

- [NC17 489](#) - *Urban Sound Planning - Needs and Achievements for Planning Urban Sound Environments in Practice483*
Joachim Scheuren, Müller-BBM GmbH; Beate Altreuther, Müller-BBM GmbH; Sonia Alves, Müller-BBM GmbH
- [NC17 531](#) - *Old Town Portland Maine; The Bourbon Street Of New England490*
Michael Bahtiarian, Noise Control Engineering, LLC
- [NC17 353](#) - *A Regulatory-Approved Regional Approach to Noise Management in Alberta's Industrial Heartland497*
Chris Bibby, SLR Consulting; Laurie Danielson, Northeast Capital Industrial Association; Pascal Everton, SLR Consulting
- [NC17 435](#) - *Estimating the Audibility of Mining Haul Trucks in a Remote National Preserve504*
Sean Connolly, Big Sky Acoustics
- [NC17 565](#) - *Measuring and Modeling the Effects of Tour Vehicle Noise in National Parks510*
Damon Joyce, National Park Service; Brent Lignell, National Park Service; Megan F Mckenna, National Park Service; Kurt M Frstrup, National Park Service
- [NC17 564](#) - *Continental Perspectives of Noise Exposure and Its Effects520*
Daniel J Mennitt, Colorado State University; Megan F McKenna, National Park Service; Kurt M Frstrup, National Park Service

Modeling

10:00 AM – River Overlook E

- [NC17 456](#) - *Scale Modeling of Acoustic Scattering525*
Gong Cheng, University of Kentucky; David W Herrin, University of Kentucky; Nan Zhang, University of Kentucky

- [NC17 505](#) - *A Comparison of Two Equivalent Source Methods for Noise Source Visualization*533
Tongyang Shi, Purdue University; Yangfan Liu, Purdue University; John Stuart Bolton, Purdue University
- [NC17 453](#) - *A Two-Step Approach to Build a FEM Model of a Built-Up Structure with Special Attention to Description of Boundary Conditions and System Damping*544
Vignesh Jayakumar, University of Cincinnati; Jay Kim, University of Cincinnati
- [NC17 548](#) - *Characterization of Aircraft Components for SEA Modeling*556
Himanshu A Dande, Gulfstream Aerospace Corporation; Tongan Wang, Gulfstream Aerospace Corporation; John Maxon, Gulfstream Aerospace Corporation; Joffrey Bouriez, Jet Aviation AG; Yi Zhang, Gulfstream Aerospace Corporation
- [NC17 503](#) - *Comparison of Methods for High Frequency Acoustic Radiation Analysis*564
Zhidong Zhang, Northrop Grumman Mission Systems; Satha T Raveendra, Comet Technology Corporation; Amey Chodankar, Wayne State University
- [NC17 395](#) - *Comparison of Low Wavenumber Models for Turbulent Boundary Layer Excitation*575
Peter D Lysak, Penn State University; William K Bonness, Penn State University; John B Fahline, Applied Research Laboratory, Penn State University

Passive Noise Control

10:00 AM – River Overlook F

- [NC17 339](#) - *Noise Suppression in Low Pressure Hydraulic Systems*584
Nathaniel R Pedigo, Georgia Institute of technology; Ryan Salmon, Georgia Institute of Technology; Elliott Gruber, Georgia institute of Technology; Kenneth A Cunefare, Georgia Institute of Technology
- [NC17 406](#) - *Studies on Influence of Geometrical Parameters of an Acoustic Black Hole*591
Chenhui Zhao, Stevens Institute of Technology; M.G. Prasad, Stevens Institute of Technology
- [NC17 393](#) - *Damping and Phase Accumulation in Finite and Infinite Structure*599
Stephen C Conlon, Penn State University; Philip A Feurtado, Penn State Applied Research Lab
- [NC17 322](#) - *Absorption Characteristics of Acoustic Resonators Combined with Porous Foam*606
Noah H. Schiller, NASA Langley Research Center; Albert R. Allen, NASA Langley Research Center
- [NC17 497](#) - *Optimization of Acoustic Performance of Highly Porous Polyurethane Foam Using Micro-Structural Based Model*617
Mohammad S. Gholami, Group d'Acoustique de l'Université de Sherbrooke (GAUS); Olivier Doutres, École de Technologie Supérieure; Noureddine Atalla, Group d'Acoustique de l'Université de Sherbrooke GAUS
- [NC17 310](#) - *Analytical and Boundary Element Solutions to Rectangular and Circular Bulk-Reacting Lined Ducts*625
Jundong Li, University of Kentucky; Peng Wang, University of Kentucky; T. W. Wu, University of Kentucky; David W. Herrin, University of Kentucky

Joint SAE/INCE-USA Session 902

Active Sound Enhancement

1:30 PM – River Overlook A/B

- [2017-01-1755](#) - *Traditional and Electronic Solutions to Mitigate Electrified Vehicle Driveline Noises*634
Frank Valeri, General Motors; Jim Lagodzinski, General Motors LLC; Scott Reilly, General Motors LLC; John Miller, GM
- [2017-01-1757](#) - *System for Augmenting the In-Cabin Sound of Electric Vehicles*640
Matthew Maunder, Ricardo UK Ltd; Ben Munday, Ricardo UK Ltd
- [2017-01-1758](#) - *A Novel Method for Objective Evaluation of Interior Sound in a Passenger Car and Its Application to the Design of Interior Sound in a luxury passenger car*647
Seung Min Lee; Seonghyeon Kim, Hyundai Motor Company; Sang Kwon Lee; Dong Chul Park, Hyundai Motor Co
- [2017-01-1754](#) - *A Research on Brand Sound Positioning and Implementing with Active Sound Design*654
Kyoung-Jin Chang, Hyundai Motor Co; So Youn Moon, Seoul National Univ; Dong Chul Park, Hyundai Motor Co; Myung Hwan Yun, Seoul National Univ; Sunghwan Park; Seonghyeon Kim, Hyundai Motor Company
- [2017-01-1756](#) - *A Systematic Approach to Engine Sound Design for Enhancing Sound Character by Active Sound Design*660
Seonghyeon Kim, Hyundai Motor Company; Seung Min Lee; Dong Chul Park, Hyundai Motor Co; Kyoung-Jin Chang, Hyundai Motor Co; Sang Kwon Lee
- [2017-01-1753](#) - *Active Cancellation of Exhaust Noise over Broad RPM Range with Simultaneous Exhaust Sound Enhancement*672
Jack Riddle, Eberspaecher North America Inc; Tom Frei, Eberspaecher North America Inc; Ya-Juan Bemman, Eberspaecher Exhaust Technology GmbH; Ishang Padalkar, Eberspaecher North America Inc; Sihui Wu, Eberspaecher North America Inc

Noise and Vibration Control Materials – Vendor Presentations

Oral Only

1:30 PM – River Overlook C

Building Acoustics Measurement Solutions in Field and Laboratory Environments
Marek Kovacik, Scantek, Inc.

STC Sound Control Product Tests
Paul L Battaglia, STC Sound Control

ROCKFON: The Acoustical Benefits of Stone Wool
Gary S. Madaras, ROCKFON

Addressing MRI Isolation Requirements
R. Dennis Huckins, Soundown Corporation; Joseph I. Smullin, J&A Enterprises, Inc.

Automotive Noise

NOISE-CON session open to SAE registratants

1:30 PM – River Overlook D

- [NC17 373](#) - *New Engine Tunnel Insulation System for Commercial Trucks677*
Zhiming Luo, Aearo Technologies LLC - a 3M Company
- [NC17 529](#) - *Weight Minimization of Noise Treatments by Balancing Absorption and Transmission Performance686*
Hyunjun Shin, Purdue University; J. Stuart Bolton, Purdue University
- [NC17 442](#) - *Study of Dynamic Characteristics of a Test Apparatus Developed to Build Squeak Propensity Database699*
Gil Jun Lee, University of Cincinnati; Jay Kim, University of Cincinnati
- [NC17 383](#) - *Wavenumber Processing of Accelerometers Embedded in Tires706*
Tyler P Dare, The Pennsylvania State University
- [NC17 439](#) - *The Influence of Sharpness on People's Responses to Wind Noise Inside Automobiles716*
Daniel Joseph Carr, Purdue University; Patricia R Davies, Purdue University
- [NC17 360](#) - *Transformation of the Subjective Magnitudes of Noise Discomfort of the Micro Commercial Vehicles into Their Corresponding Rating Scales725*
Yang Shen, SAIC GM Wuling Automobile Co., Ltd.; Dou Li, Shanghai Jiao Tong University; Yu Huang, Institute of Vibration Shock and Noise, School of Mechanical Engineering, Shanghai Jiao Tong University; Yuanyi Huang, SAIC GM Wuling Automobile Co., Ltd.; Haijun Wang, SAIC GM Wuling Automobile Co., Ltd.; Weikang Jiang, Shanghai Jiao Tong University

Measurements

1:30 PM – River Overlook E

- [NC17 421](#) - *Sound Intensity Mapping to Synthesize and Rapidly Optimize the Reduction of Machinery Noise Emission733*
Steven M.K. Jorro, E-A-R Thermal Acoustic Systems, Aearo Technologies LLC; Michael Hawn, E-A-R Thermal Acoustic Systems, Aearo Technologies LLC; Dino Perin, E-A-R Thermal Acoustic Systems, Aearo Technologies LLC, a 3M company
- [NC17 366](#) - *Use of CNT Thin-Film Assemblies as Microphones Through Hot-Film Anemometry741*
Micaela M Thiery, Michigan Technological University; Andrew R Barnard, Michigan Technological University
- [NC17 467](#) - *Construction of a Spherical Sound Source From CNT Thin-Film749*
Micaela M Thiery, Michigan Technological University; Stephania Vaglica, Michigan Technological University; Steven Senczyszyn, Michigan Technological University; Andrew R Barnard, Michigan Technological University
- [NC17 355](#) - *Hydraulic Fluid-Borne Noise Measurement and Simulation for Off-Highway Equipment757*
Jinghao Liu, Deere and Company; Sanghoon Suh, Deere and Company; Yuzhen Yang, Deere and Company
- [NC17 474](#) - *An Assessment of Background Noise Variability in a Controlled Laboratory Environment766*
Seth E Bard, IBM Hudson Valley Acoustics Lab

[NC17 498](#) - *Background Noise Sampling Effect on the Statistical Background Noise Correction*774
Charles H Oppenheimer, HP, Inc.

[NC17 506](#) - *Transmission Loss: What Can Be Done Using Sound Intensity Measurements at the Aperture Between Coupled Anechoic-Reverberant Rooms?*783
Olivier Robin, Groupe d'Acoustique de l'Université de Sherbrooke; Nouredine Atalla, Groupe d'Acoustique de l'Université de Sherbrooke

Passive and Active Noise Control

1:30 PM – River Overlook F

[NC17 482](#) - *An Integral-Based Impedance-To-Scattering Matrix Method for Silencer Analysis*791
Peng Wang, University of Kentucky; Tim Wu, University of Kentucky

[NC17 380](#) - *Improved Low-Frequency Broadband Absorption Using 3D Folded Cavity Acoustic Liners*799
Andrew T. Chambers, Oklahoma State University; James M. Manimala, Oklahoma State University; Michael G Jones, NASA Langley Research Center

[NC17 454](#) - *The Effect of Additives on Vibration Damping in Polyvinyl Chloride and Acrylic Formulations*807
Michael Funderburg, Eastman Chemical Company; Simone Wubbe, Eastman Chemical Company

[NC17 403](#) - *A Methodology for the Optimal Positioning of Damping Sheets On Panels*815
Gai Vo Thi, Free Field Technologies, MSC Software Belgium; Jonathan Jacqmot, Free Field Technologies, MSC Software; Benoit Van den Nieuwenhof, Free Field Technologies, MSC Software Belgium; Maxime Raskin, Free Field Technologies, MSC Software Belgium

[NC17 459](#) - *Analytical Modeling of a Particle Impact Damper on a Cantilever Beam*824
Kamil Kocak, Georgia Institute of Technology; Kenneth A. Cunefare, Georgia Institute of Technology

[NC17 335](#) - *Active Control of Vibrations Using an Audio Signal Processor*830
Stephan Algermissen, German Aerospace Systems (DLR); Hans Peter Monner, German Aerospace Systems DLR

Joint SAE/INCE-USA Session 904

Aerodynamic Noise Prediction and Validation

2:30 PM – Ballroom D

[2017-01-1787](#) - *Digital Aeroacoustics Design Method of Climate Systems for Improved Cabin Comfort*839
Jan Biermann; Minsuk Kim, Exa Corporation; Adrien Mann, Exa Corporation; Barbara Neuhierl, Exa Corporation

[2017-01-1781](#) - *The Effect of HVAC Buffeting on Automatic Speech Recognition Systems*852
Joshua Wheeler, Ford Motor Company

[2017-01-1782](#) - *Modelling and Optimization of Plug Flow Mufflers in Emission Control Systems*857
Jobin Puthuparampil; Henry Pong; Pierre Sullivan, Univ of Toronto

2017-01-1807 - *Using the Modal Response of Window Vibrations to Validate SAE Wind Noise Models*
Richard DeJong, DeJong Engineering Services; Gordon Ebbitt, Toyota Technical Center
NOTE: This SAE paper will be presented at the end of Session 904, but is not part of the joint SAE/INCE-USA Session and is not included in these proceedings.

Joint SAE/INCE-USA Session 906

NVH Considerations for Hybrid and Electric Vehicles

4:20 PM – River Overlook A/B

- [2017-01-1763](#) - *Evaluation of Multiple Electric Vehicle Sources and New Concepts Regarding Speed-Dependency866*
Lisa Steinbach; Ercan Altinsoy, Dresden University of Technology; Robert Rosenkranz, Tu Dresden
- [2017-01-1762](#) - *Electric Vehicle Detectability: Impact of Artificial Noise on Ability of Pedestrians to Safely Detect Approaching Electric Vehicles874*
Michael Roan, Virginia Tech; Dan Glaser, General Motors LLC; Michael Neurauter, Virginia Tech Transportation Institute; Douglas Moore, General Motors
- [2017-01-1889](#) - *Optimization of Electric Vehicle Exterior Noise for Pedestrian Safety and Sound Quality884*
Todd Tousignant, FEV Inc; Georg Eisele, FEV GmbH; Kiran Govindswamy, FEV Inc; Christoph Steffens, NVH Consulting; Dean Tomazic, FEV Inc
- [2017-01-1890](#) - *The Analysis of the Stiffness-Damping Parameters of a H-Bahn Vehicle892*
Xingyu Zhang; Sanbao Hu, Wuhan Univ of Technology; Bo Yang, Wuhan Univ of Technology; Manchuang Zhang
- [2017-01-1892](#) - *Transient Vibration Simulation of Motor Gearbox Assembly Driven by a PWM Inverter902*
Yosuke Tanabe, Hitachi Ltd; Katsuhiko Hoshino, Hitachi Automotive Systems Americas Inc; Masanori Watanabe, Hitachi Ltd; Akira Inoue, Hitachi America Ltd; Masaru Yamasaki; Takafumi Hara, Hitachi Ltd

IT and Data Center Noise

4:20 PM – River Overlook C

- [NC17 509](#) - *Proposed Large Format Printer Noise Measurement Procedures911*
Charles H Oppenheimer, HP, Inc.; Nicola Cofelice, HP, Inc.; David Chanclon, HP, Inc.; Katy Ferguson, HP, Inc.
- [NC17 363](#) - *Method of Inverse-Square Law Qualification of Hemi-Anechoic Chambers for Parallelepiped Measurement Surfaces in ISO 3744921*
Kohei Shimoda, Fuji Xerox Co., Ltd.
- [NC17 470](#) - *Calculating Frequency Dependent Sound Pressure Levels in Data Centers During Fire Suppression Discharges929*
Stephanie M Vaglica, Tyco Fire Protection Products
- [NC17 368](#) - *Performance Evaluation of Hard Disk Drives in Noisy Environments937*
Trinoy Dutta, Michigan Technological University; Andrew R. Barnard, Michigan Technological University
- [NC17 372](#) - *Analyzing The Causes of Failure of Hard Disk Drives Due to Acoustic Noise with Its Modal Parameters948*
Siddharth Yogesh Parmar, Michigan Technological University; Trinoy Dutta, Michigan Technological University; Andrew R. Barnard, Professor at Michigan Technological University; Charles D. Van Karsen, Michigan Technological University

Automotive Noise

4:20 PM – River Overlook D

- [NC17 369](#) - *Active Noise Control of Automotive Exhaust Noise Using Carbon Nanotube Speakers954*
Suraj Prabhu, Michigan Technological University; Andrew Barnard, Michigan Technological University
- [NC17 332](#) - *Effect Of Corrosion on Noise-Vibration-Harshness Characteristics and Performance of a Cold End Exhaust System961*
Jagdish Dholaria, FAURECIA CLEAN MOBILITY; Scott Mee, Faurecia Clean Mobility; Brian Rose, faurecia clean mobility; Charles Shappell, Faurecia Clean Mobility; Bharat Joshi, Faurecia Clean Mobility
- [NC17 543](#) - *Identification of Interior Noise Contributed From Partially Correlated Vibrational And Acoustical Sources969*
Chenguang Wang, Shanghai Jiao Tong University; Weikang Jiang, Shanghai Jiao Tong University; Yang Shen, SAIC GM Wuling Automobile Co., Ltd.; Kun Wang, SAIC GM Wuling Automobile Co., Ltd.
- [NC17 342](#) - *Effect of Gear Tooth Friction on the Vibro-Acoustics of Hypoid Gears977*
Srikumar C Gopalakrishnan, University of Cincinnati; Yawen Wang, University of Cincinnati; Teik C. Lim, University of Cincinnati
- [NC17 408](#) - *Robust NVH Development of Steering Systems Using In-Situ Blocked Forces from Measurements with Low-Noise Driver Simulators987*
Michael Sturm, Robert Bosch Automotive Steering LLC; Craig Marchand, General Motors; Michael Priebe, MB Dynamics; Scott Sherman, General Motors; Michael Yankonis, Robert Bosch Automotive Steering LLC; Andy Moorhouse, University of Salford; Jonathan Hirscher, General Motors; Shasvat Parikh, MB Dynamics

Measurements

4:20 PM – River Overlook D

- [NC17 318](#) - *Radiated Shipboard Noise From a Research Vessel in the Great Lakes995*
Andrew R Barnard, Michigan Technological University
- [NC17 486](#) - *Assessment of the Influence of Seasonal Variation on Road Traffic Noise.1004*
Eoin A King, University of Hartford; Elizabeth Caltagirone, University of Hartford; Johanna Owens, University of Hartford; Robert Celmer, University of Hartford; John LoVerde, Veneklasen Associates; Wayland Dong, Veneklasen Associates; Samantha Rawlings, Veneklasen Associates
- [NC17 388](#) - *Development of an Aircraft Intercom Replication System for Assessment of In-Flight Intercom Acoustic Sound Pressure Levels1012*
Silin Yang, NRC Aerospace; Andrew Price, NRC Aerospace; Sebastian Ghinet, NRC Aerospace; Viresh Wickramasinghe, NRC Aerospace; Eric Chen, NRC Aerospace; Anant Grewal, NRC Aerospace
- [NC17 469](#) - *Cost-Effective Unmanned Aerial System Applications for Outdoor Noise Monitoring1020*
Mark C Storm, AECOM

WEDNESDAY – 14 JUNE 2017

Plenary Session

8:00 AM – River Overlook A/B

- [NC17 002](#) - *Measuring and Modeling Wind Noise*1029
Richard DeJong, Calvin College and DeJong Engineering Services

Joint SAE/INCE-USA Session 901

Lightweight Vehicle Construction Acoustic Design

10:00 AM – Ballroom D

- [2017-01-1813](#) - *Acoustically Absorbing Lightweight Thermoplastic Honeycomb Panels*1042
James Jonza, 3M Company; Taewook Yoo, 3M Company; Thomas Herdtle, 3M Company;
Jeffrey Kalish; Ronald Gerdes, 3M Company; Georg Eichhorn, 3M Deutschland GmbH
- [2017-01-1815](#) - *Some Thoughts on Dissipative Sound Package Systems*1052
Pranab Saha, Kolano and Saha Engineers Inc; Satyajeet Deshpande, Kolano and Saha
Engineers Inc
- [2017-01-1816](#) - *Multi-Physics Simulation of Ultra-Lightweight Carbon Nanotube Speakers*1058
Mahsa Asgarisabet, Michigan Technological Univ; Andrew Barnard, Michigan
Technological Univ
- [2017-01-1817](#) - *Two-Component Injection Molding as a Noise Countermeasure for Polycarbonate
Glazing*1065
Steven Gasworth, SABIC; Matteo Terragni, SABIC; Vasudev Nilajkar, Sabic Technology Ctr
- [2017-01-1814](#) - *Assessment of Lightweight Automotive Glass Solutions on Interior Noise Levels & Sound
Quality*1071
Todd Tousignant, FEV Inc; Shivani Polasani, Corning Inc; Vikram Bhatia, Corning Inc;
Kiran Govindswamy, FEV Inc; W Keith Fisher, Corning Inc
- [2017-01-1812](#) - *Optimizing Transmission Loss for Lightweight Body Structures*1077
Steve Sorenson, Toyota Technical Center USA Inc; Gordon Ebbitt, Toyota Technical
Center USA Inc; Scott Smith, Toyota Motor Corp; Todd Remtema, Toyota Technical
Center USA Inc

Joint SAE/INCE-USA Session 903

Product Development Methods: Cross-Disciplinary Tools and Processes for Delivering NVH Attribute

10:30 AM – River Overlook A/B

- [2017-01-1760](#) - *A Desktop Procedure for Measuring the Transmission Loss of Automotive Door Seals*1083
Weimin Thor, Purdue University; J Stuart Bolton, Purdue University
- [2017-01-1761](#) - *Integration of an End-of-Line System for Vibro-Acoustic Characterization and Fault
Detection of Automotive Components Based on Acoustic Particle Velocity Measurements*1091
Daniel Fernandez Comesana, Microflown Technologies BV; Emiel Tijs, Microflown
Technologies BV; Graciano Carrillo Pousa

[2017-01-1773](#) - *The Dual Phase Twin Synchronous Belt Drive*1097
Jing Yuan, Gates Corporation

Community Noise

10:30 AM – River Overlook C

[NC17 329](#) - *Transportation Noise Exposure Is Strongly Correlated with Increased Morbidity and Mortality*1104
Daniel J Fink, The Quiet Coalition

[NC17 496](#) - *Estimating Long-Term Noise Levels from Short-Term Noise Measurements and a Long Term Reference Location*1112
Paul L Burge, AECOM; Chris Kaiser, AECOM; Cole Martin, AECOM; Jackson Redmond, AECOM

[NC17 455](#) - *Novel Approach to Visualization of Soundplan Data for Analysis of Mining Noise*1120
Michael Raley, Acoustics By Design

[NC17 466](#) - *Investigation of the Correlation Between Transformer Sound Levels, Geomagnetically-Induced Currents, and Solar Flares*1127
Chris Howell, Burns & McDonnell; Ian R Brewere, Burns & McDonnell

Automotive Noise and Vibration Control

10:30 AM – River Overlook D

[NC17 494](#) - *Mapping of Automotive Vehicle Command Functions to a Subset of Pushbutton Sounds*1135
Matthew R Edwards, Georgia Institute of Technology; Kenneth A Cunefare, Georgia Institute of Technology; Erica E Ryherd, University of Nebraska

[NC17 294](#) - *Microphone Array Measurement Based Contribution Analysis of Aeroacoustic Noise Sources to Interior Noise Of Automobiles*1144
Seongil Hwang, Texas A&M University; Myunghan Lee, Hyundai Motor Company; Kang-Duck Ih, Hyundai Motor Company; Jungoo Kang, SM Instruments Inc.; Youngkey Kim, SM Instruments Inc.; Yong-Joe Kim, Texas A&M University

[NC17 413](#) - *Gasoline Turbo-Boosted Direct Injection Engine Calibration Impact on Tail Pipe Acoustics Utilizing Design for Six Sigma*1152
Yuntian Wang, Faurecia Clean Mobility; Brandon Sobbecki, Faurecia Clean Mobility; Xin Hua, Faurecia Clean Mobility

[NC17 476](#) - *An Annular Helmholtz Resonator and Its Tuning Performance on Two-Box Single Exhaust System*1160
Xin Hua, Faurecia Clean Mobility; Jagdish Dholaria, Faurecia Clean Mobility

Measurements

10:30 AM – River Overlook E

[NC17 441](#) - *Evaluating Damping Treatments Using Radiated Sound Power Normalized by Input Mechanical Power*1168
John Zehme, Aearo Technologies LLC

[NC17 434](#) - *Hammering Sound Characteristics of Tunnel by Rotary Hammer Inspection Equipment*1174
Yuichi Yonemoto, RION CO., LTD.; Yasutaka Nakajima, RION CO., LTD.; Tetsuya

Taniguchi, West Nippon Expressway Engineering Kyushu CO., LTD.; Daisuke Kuwano, Elwing CO., LTD.

[NC17 555](#) - *Modified Time Difference of Arrival Algorithm for Sound Source Localization with Triangulation1181*

Tamim Reza, University of Michigan-Flint; Na Zhu, University of Michigan-Flint

[NC17 528](#) - *The Effect of Diffusers and Absorbers on the Field Characteristics of a Reverberation Room1189*

Taner Onsay, FCA; Dilal Rhazi, FCA